



State of California, Department of Health Care Services  
**Tips for Manipulating Excel Pivot Tables**  
September 2010

Microsoft's Excel spreadsheet software includes a way to manipulate data called Pivot Tables. This provides the user an easy-to-use, intuitive, and user-friendly method for displaying quantitative data for one or more variables. RASS has locked down the functionality of the pivot tables so as to secure the data. This limits the user's ability to manipulate the pivot table data. The following are some basic tips for manipulating RASS pivot tables.

#### Field and Data Variables

Pivot Tables must have at least one data variable with values that it can manipulate arithmetically, e.g., sum, or count as unique values. Pivot Tables must also have at least one field variable that displays one or more values that the data can be categorized by. For instance, a Pivot Table could include a data variable with the number of Medi-Cal beneficiaries, and a field variable of "County" with values of Alameda, Contra Costa, etc.

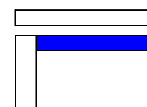
#### Making a Pivot Table

A Pivot Table is created from a list or data base in Excel, Access, or some other importable data base. Each variable in this data base must have a name (in Excel, the first record). (To use a data base outside Excel, the Query software must be installed from your Microsoft Office suite.) Assuming there are at least two variables in this data base, one for a field and one for a data variable, a Pivot Table can be created by selecting Data from the Toolbar, then selecting Pivot Table Report, then following the steps presented. When a field is positioned above the Pivot Table, its Orientation is "Page." When showing as a part of the Pivot Table as a column variable, its Orientation is "Column." When displayed as a row, its Orientation is "Row."

Note that a Pivot Table carries the entire data base from which it was built even when the originating Excel data base worksheet is deleted after the Pivot Table is created. (The advantage of deleting the worksheet with the data base (not the Pivot Table) is that the size of the file is reduced substantially.)

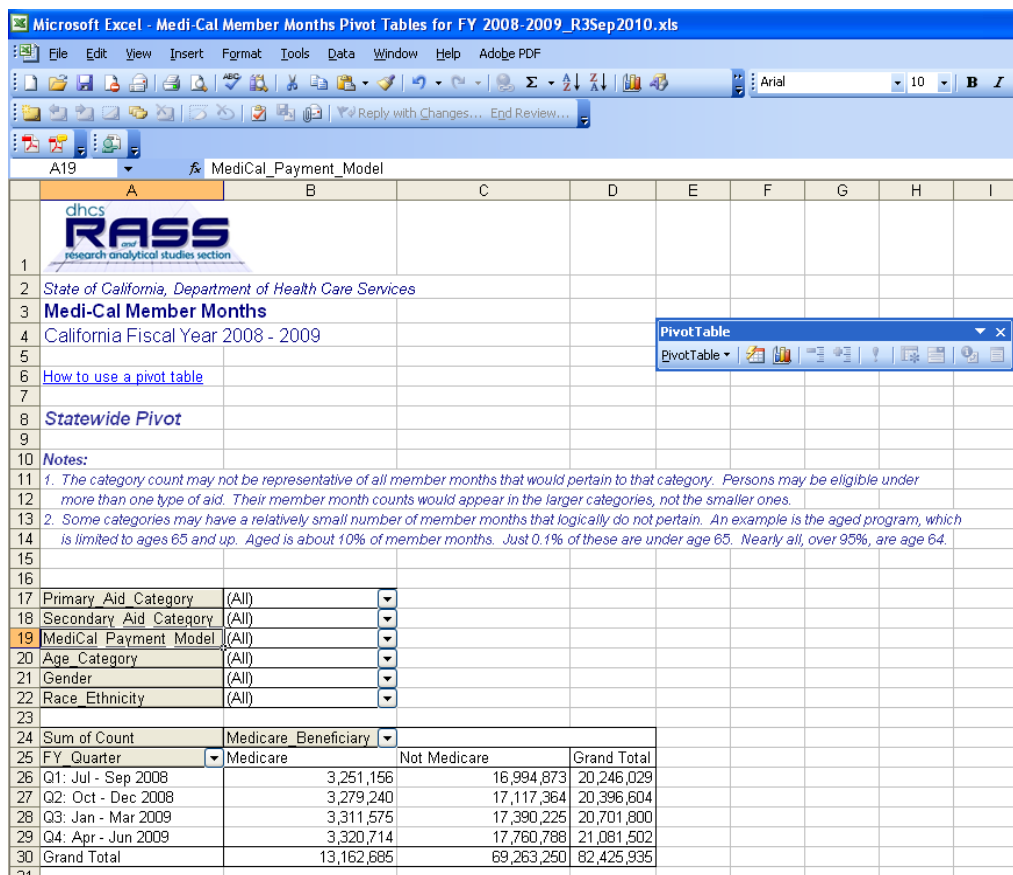
#### Creating Column and Row Headings from within a Pivot Table

After the Pivot Table is built, to display the data according to the values for one of the fields, drag (by selecting and holding down the left mouse button) the field either directly above the Grand Total or directly to the left of Grand Total, then drop the field by releasing the mouse button. When the field is in the correct position for displaying as a row variable, you will see a box with a blue patch on top in the form of a landscape rectangle (a wide, short box).



To display the values for a field down the left side of the page, drag the field to the left of the Total for the data variable, and release when the box is in the form of a portrait rectangle (a narrow, tall box) with a patch of blue on the left.

Pivot Tables permit the user to nest variables, that is, to put more than one variable in the row or column position such that one field's values are categorized within each of another field's values.



Microsoft Excel - Medi-Cal Member Months Pivot Tables for FY 2008-2009\_R3Sep2010.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

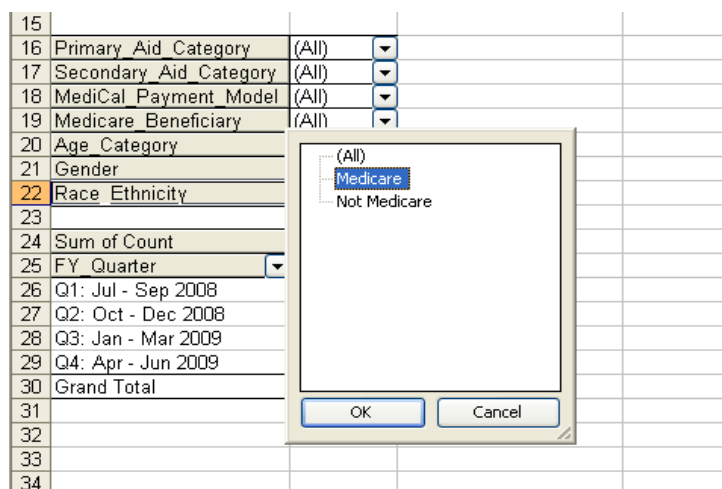
A19 MediCal\_Payment\_Model

dhcs  
**RASS**  
research analytical studies section

1  
2 State of California, Department of Health Care Services  
3 **Medi-Cal Member Months**  
4 California Fiscal Year 2008 - 2009  
5  
6 [How to use a pivot table](#)  
7  
8 **Statewide Pivot**  
9  
10 **Notes:**  
11 1. The category count may not be representative of all member months that would pertain to that category. Persons may be eligible under  
12 more than one type of aid. Their member month counts would appear in the larger categories, not the smaller ones.  
13 2. Some categories may have a relatively small number of member months that logically do not pertain. An example is the aged program, which  
14 is limited to ages 65 and up. Aged is about 10% of member months. Just 0.1% of these are under age 65. Nearly all, over 90%, are age 64.  
15  
16  
17 Primary Aid Category (All)  
18 Secondary Aid Category (All)  
19 MediCal Payment Model (All)  
20 Age Category (All)  
21 Gender (All)  
22 Race Ethnicity (All)  
23  
24 Sum of Count Medicare Beneficiary  
25 FY Quarter Medicare Not Medicare Grand Total  
26 Q1: Jul - Sep 2008 3,251,156 16,994,873 20,246,029  
27 Q2: Oct - Dec 2008 3,279,240 17,117,364 20,396,604  
28 Q3: Jan - Mar 2009 3,311,575 17,390,225 20,701,800  
29 Q4: Apr - Jun 2009 3,320,714 17,760,788 21,081,502  
30 Grand Total 13,162,685 69,263,250 82,425,935  
31

### Subsetting to Selected Values

Fields in the Page can be subset such that data in the Table show for only a selected value for that field. To subset, click on the small triangle pointing down in the same cell as (All) next to the PivotTable Field name, highlight the value you wish to subset by, and select ok.



15  
16 Primary Aid Category (All)  
17 Secondary Aid Category (All)  
18 MediCal Payment Model (All)  
19 Medicare Beneficiary (All)  
20 Age Category  
21 Gender  
22 Race Ethnicity  
23  
24 Sum of Count  
25 FY Quarter  
26 Q1: Jul - Sep 2008  
27 Q2: Oct - Dec 2008  
28 Q3: Jan - Mar 2009  
29 Q4: Apr - Jun 2009  
30 Grand Total  
31  
32  
33  
34

(All)  
Medicare  
Not Medicare

OK Cancel

### Grouping Selected Values

If data for more than one value need to be displayed, that is, values must be grouped in a manner different than what is presented in the Pivot Table, several methods can be used.

1) The "Grouping" method - With the variable containing the values to be selected in either the Column or Row orientation, select one or more of the values to be grouped together (by clicking on each value while holding down the Ctrl key), then, while the cursor is still on one of the highlighted values, right-click the mouse and select Group and Outline, then Group... to re-categorize these values into a new category (which can then be renamed within the formula bar).

2) The "Hide items" method – You can hide items in the Pivot Table by dropping the field into the table (see Creating Column and Row Headings from within a Pivot Table above). Select the down arrow to the right of the field name, deselect the check box next to the items you do not wish to see data for, and select ok. Caution: You must remember when you hide values within a Pivot Table because there is nothing showing in the Pivot Table which reminds you.

Age Category	Q1: Jul - Sep 2008	Q2: Oct - Dec 2008	Q3: Jan - Mar 2009	Q4: Apr - Jun 2009	Grand Total
1 - 18	1,146,400	9,225,832	9,371,087	9,580,514	37,323,833
19 - 21	764,496	773,619	795,803	821,797	3,155,715
22 - 44	493,819	4,519,893	4,604,024	4,707,431	18,325,167
45 - 54	325,284	1,339,592	1,361,926	1,387,267	5,414,069
55 - 64	946,290	960,611	977,653	991,536	3,876,090
65 - 74	291,687	1,301,471	1,311,904	1,315,889	5,220,951
75 - 84	932,656	937,084	943,605	944,278	3,757,623
Invalid	1	3		1	5
Under 1	972,288	958,472	949,405	942,985	3,823,150
85 & Over	373,108	380,027	386,393	389,804	1,529,332
	1,246,029	20,396,604	20,701,800	21,081,502	82,425,935